

IN THE CLAIMS:

1. (Original) A holographic display comprising:

a source of coherent light;

an Electrically Addressable Spatial Light Modulator (EASLM) in the path of the light source and arranged in use to display successively a set of sub-holograms which together correspond to a holographic image; and

light guiding means arranged to guide modulated light output from the EASLM such that the sub-holograms appear successively in respective tiled regions of an EASLM projection surface.

characterised in that

the source of coherent light is arranged to illuminate the EASLM with an angle of incidence which depends upon the spatial position within the hologram of a sub-hologram being displayed, the angle being switched in synchronisation with the sub-hologram update rate of the EASLM.

2. (Original) A display according to claim 1, wherein said light guiding means comprises replicating optics arranged in use to replicate the light output from the EASLM so as to provide multiple images.

3. (Original) A display according to claim 2, wherein the light guiding means comprises an array of electronically controlled shutters disposed between the replicating optics and said EASLM projection surface, said shutters being controlled

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such that only that shutter, which is aligned with a tiled region of the EASLM projection surface associated with a given sub-hologram, is open when the EASLM is being driven by that sub-hologram.

4. (Previously Presented) A display according to claim 1, wherein the light guiding means comprises means disposed at the EASLM projection surface, or between the EASLM and the EASLM projection surface, for causing the apparent diverging light illumination of the EASLM images to be redirected to appear to be a plane wave or other wavefront illumination.

5. (Original) A display according to claim 4, wherein said means causing diverging light to be redirected to provide an apparent wavefront illumination comprises an array of lenses or a holographic redirector disposed at or near the EASLM projection surface.

6. (Previously Presented) A display according to claim 1, wherein the light source used to illuminate the EASLM comprises a single light source, or a plurality of light sources.

7. (Original) A display according to claim 6, wherein the light source comprises an array of light sources disposed behind the replicating optics.

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8. (Previously Presented) A display according to claim 1, wherein baffles are positioned in an intermediate image plane so that light associated with the d.c. spot and conjugate image is blocked.

9. (Original) A method of displaying a hologram, the method comprising:
successively displaying on an Electrically Addressable Spatial Light Modulator (EASLM) a set of sub-holograms which together correspond to a holographic image;
directing coherent light onto the EASLM; and
guiding modulated light output from the EASLM such that the sub-holograms are displayed successively in respective tiled regions of an EASLM projection surface, characterised by the steps of
illuminating the EASLM with said source of coherent light at an angle of incidence which depends upon the spatial position within the hologram of a sub-hologram being displayed, and switching the angle in synchronisation with the sub-hologram update rate of the EASLM.

10. (Currently Amended) A holographic display according to claim 1,
wherein [comprising]:
a light source;
an Electrically Addressable Spatial Light Modulator (EASLM) in the path of the
light source and arranged in use to display successively a set of sub-holograms which
together correspond to a holographic image;

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~~light guiding means arranged to guide modulated light output from the EASLM
such that the sub-holograms are displayed successively in respective tiled regions of an
EASLM projection surface; and~~

an array of lenses are disposed on the output side of said EASLM projection
plane, the lenses of the array being aligned with respective tiled regions.

11. (Previously Presented) A holographic display comprising a plurality of
displays according to claim 10, the displays being combined to enable a holographic
image to be displayed with a large number of pixels.